# 納入仕樣書 SPECIFICATION

客	戶	<b>IEWC Germany</b>	GmbH
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仕樣書番號 No.

Customer

U4491

Rev No. 01

發行日期 Date

2014年06月17日

P/N 441501

品名

**RoHS** 

**PVC Jacket Cord** 

Part Name

規格

**SVT #18X2C 105°C** Black

Part Spec.

承認印

Approval Signature



大興電線電纜股份有限公司 TA HSING Electric Wire & Cable Co., Ltd.

Spec	U4491	承認書修訂履歷表	修訂	單位
No.	U4491	序	技術	う 課
NO.	西元.月.日.	修訂內容	擔當	承 認
$\triangle$	2014.06.17	<ol> <li>客戶名稱變更爲 IEWC Germany GmbH Page:封面</li> <li>導體標稱變更,原 線數/線徑 41/0.16mm =&gt;導體電阻 22.84 Ω/km 以下 Page: 1</li> <li>印字變更 Page: 1</li> </ol>	蕭阿鸞	吳順忠

## Spec No.U4491

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Construction	1-2
Safety Certification	3-6

# **SPECIFICATION**

1. Subject: UL & CSA type RoHS PVC jacket cord.

#### 2. Construction & size:

(a) Type Max voltage Max current File No.

cord SVT 300V UL E56356 CSA LL38816

#### (b) Flexible cord:

UL & CSA type: SVT Max temp: 105°C Max voltage: 300V No. of Conductor: 2

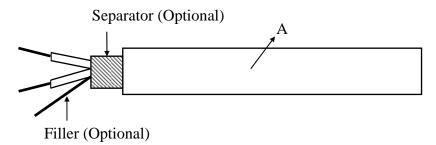
Conductor		PVC insulation			PVC jacket		
AWG	Conductor re-	Min. average	Min. thickness	O.D.	Min. average	Min. thick-	O.D.
/No	sistance test	thickness	at any point	mm	thickness	ness	mm
	(20℃) △					at any point	
18/2	22.84Ω/km	15 mils	13 mils	±0.1	30 mils	24 mils	±0.2
13,2	max.	0.38 mm	0.33 mm	2.15	0.76 mm	0.61 mm	5.9

Conductor: Bare annealed copper wire.

## 3. Insulation Color: Black, White

**Jacket Color: Black (050)** 

## 4. Marking: 🛆



A: (UL) SVT E56356 VW-1 105°C 300V 18AWGX2C TA HSING CSA SVT 105°C 300V LL38816 2X0.824mm²(18AWG) FT2 LF

## 5. Method to examination: According to UL 62, CSA 22.2 NO.49 & RoHS.

**6.** Electrical properties:

I	TEM	RESULT	
9		All specimen shall withstand 1500V for one minute without break down.	
Spark test		All specimen shall withstand 3000V for 0.15 second without break down.	
Insulation resistance test (2	20°C)	Not less than 2.5 megohms. 1000Feet.	

7. Physical properties:

es:		
ITEM	RESULT	
Unaged	Tensile-strength	1500psi or 1.05 kgf/mm <sup>2</sup> min.
	Elongation	100% min.
Aged in a full draft cir-	Tensile-strength	Min. acceptable 85% of the result
culation air oven at		with unaged specimen
136°C / 168 hrs.	Elongation	Min. acceptable 65% of the result
		with unaged specimen
Unaged	Tensile-strength	1500psi or 1.05 kgf/mm <sup>2</sup> min.
	Elongation	100% min.
Aged in a full draft cir-	Tensile-strength	Min. acceptable 85% of the result
culation air oven at		with unaged specimen
136°C / 168 hrs.	Elongation	Min. acceptable 45% of the result
		with unaged specimen
		The sample shall not show any
plete turns around a mandrel which have		crack either on the surface or inter-
		nality.
Oven temp.: $121^{\circ}\text{C}\pm 1^{\circ}\text{C}/1$	1 hr.	The thickness of sample shall not
weight.: 300g Insulation,	2000g Jacket	decrease more than 50%.
1 1	<u> </u>	The sample shall not show any
of $-20^{\circ}\text{C}\pm1^{\circ}\text{C}$ for 4 hours	s and then tightly	crack either on the surface or inter-
wound, for six complete	e turns around a	nality.
mandrel have 19mm diameter while at		
above temperature.		
VW-1		Specimen continues to flame no
		longer than 60 seconds after any
		application and no burning particle
		or drip shall fall from the sample.
As per RoHS for Lead con	ntent	1000ppm Max.
	ITEM Unaged  Aged in a full draft circulation air oven at 136°C/168 hrs.  Unaged  Aged in a full draft circulation air oven at 136°C/168 hrs.  Sample to be tightly wo plete turns around a matth 12.7 mm diameter.  Than place in circulating perature: 121°C±1°C for Oven temp.: 121°C±1°C/weight.: 300g Insulation,  Sample have been subject of -20°C±1°C for 4 hour wound, for six complete mandrel have 19mm dabove temperature.  VW-1	Unaged  Aged in a full draft circulation air oven at 136°C/168 hrs.  Elongation  Unaged  Tensile-strength Elongation  Elongation  Tensile-strength Elongation  Tensile-strength Elongation  Aged in a full draft circulation air oven at 136°C/168 hrs.  Elongation  Sample to be tightly wound for six complete turns around a mandrel which have the 12.7 mm diameter.  Than place in circulating air oven temperature: 121°C±1°C for one hour.  Oven temp.: 121°C±1°C/1 hr.  weight.: 300g Insulation, 2000g Jacket  Sample have been subject to a temperature of -20°C±1°C for 4 hours and then tightly wound, for six complete turns around a mandrel have 19mm diameter while at above temperature.



#### ZJCZ.E56356 Flexible Cord

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#### Flexible Cord

See General Information for Flexible Cord

TA HSING ELECTRIC WIRE & CABLE CO LTD

E56356

NO. 23 CHENG-TIEN ROAD TU-CHENG NEW TAIPEI, 23674 TAIWAN

Clock cord, Type(s) Clock

Decorative cord, Type(s) CXTW, SPT-1W, SPT-2W, XTW

 $\textbf{Dryer and range cord}, \ \mathsf{Type}(s) \ \mathsf{SRDT}$ 

Heater cord, Type(s) HPN, HPN-R, HSJ, HSJ-R, HSJO, HSJOO

Jacketed cord, Type(s) S, SE, SEO, SJ, SJE, SJEO, SJEOW, SJEW, SJO, SJOOW, SJOOW, SJOW, SJT, SJTOO, SJTOOW, SJTOW, SJTW, SJTW-R, SO, SOO, SOOW, SOW, ST, STO, STOO, STOOW, STOW, STW, SV, SVE, SVEO, SVO, SVOO, SVT, SVTO, SVTOO

Parallel cord, Type(s) NISPT-1, NISPT-2, SP-2, SP-3, SPT-1, SPT-2, SPT-2-R, SPT-3

Tinsel cord, Type(s) TPT, TST

Trademark and/or Tradename: "E56356", "TA HSING"

Last Updated on 2013-09-26

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# CERTIFICATION RECORD

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File No: 038816\_0\_000

Class No: 5831 01 WIRES Flexible Cord

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Ta Hsing Electric Wire & Cable Co.,

Ltd.

4501753 23 Cheng-Tien Rd

Tu-Cheng Hsiang Taipei Hsien, 236

Taiwan

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4680640 Wanan Industrial Development Zone

Luojiang District Quanzhou, Fujian

China

May 17, 2010 (Replaces: August 1, 2008)

#### TO THE REQUIREMENTS OF CSA STANDARD C22.2 NO 49-06:

Rated Size of

Voltage Conductors No of Insul Jacket

Type	(V)	(AWG)*	Conductors	Type	Type	Notes		
• Temperature rating 60C:								
SPT-1	300	20, 18	2, 3	PVC	-	1, 2, 3,11		
NISPT-1	300	18	2	PVC	PVC	1,2,7,10		
SPT-2	300	18, 16	2, 3	PVC	-	1, 2, 3,7,11		
NISPT-2	300	18,16	2	PVC	PVC	1,2,7,10		
SPT-3	300	18-10	2, 3	PVC	-	1, 2, 3		
SVT, SVTO, SVTOO	300	18, 17, 16	2, 3	PVC	PVC	1, 2, 6		
SJT, SJTO, SJTOO	300	18-10	2-6	PVC	PVC	1, 2, 6		
ST, STO, STOO	600	18-2	2 or more	PVC	PVC	1, 2, 6		
TX	125	20	2	PVC	-	1, 2		
PXT	125	20	2	PVC	-	1, 2		
TPT	300	27	2	PVC	-	1, 2, 9		
SJ	300	18-10	2-6	CSM	CPE	1, 2, 9		
SJTW	300	18-10	2-6	PVC	PVC	1, 2, 12		
STW	600	18-2	2 or more	PVC	PVC	1, 2, 12		
• Tem	perature ratir	ng 90C:						
HPN	300	18, 16	2, 3	CPE	-	2, 4, 8		
HPN	300	14-18	2	CR	-	2, 5		
SJO, SJOO	300	18-10	2-6	CSM	CPE	1, 2, 9		
• Tem	perature ratir	ng 105C:						
SPT-1	300	20, 18	2, 3	PVC	-	1, 2, 3,7,11		
NISPT-1	300	18	2	PVC	-	1,2,7, 10		
SPT-2	300	18, 16	2, 3	PVC	-	1, 2, 3,7,11		
NISPT-2	300	18,16	2	PVC	-	1,2,7, 10		
SPT-3	300	18-10	2, 3	PVC	-	1, 2, 3, 7		
SVT, SVTO, SVTOO	300	18, 17, 16	2, 3	PVC	PVC	1, 2, 6		
SJT, SJTO, SJTOO	300	18-10	2-6	PVC	PVC	1, 2, 6		
ST, STO, STOO	600	18-2	2 or more	PVC	PVC	1, 2, 6		
HPN	300	18, 16	2, 3	CPE	-	1, 2, 4		
SJTW	300	18-10	2-6	PVC	PVC	1, 2,12		
STW	600	18-2	2 or more	PVC	PVC	1,2,12		
*mm <sup>2</sup> condu	uctor sizes als	so apply						

#### Notes:

- 1. In all colours except for clear and translucent.
- 2. Flame classification FT2.
- 3. Insulation type for bonding (grounding) conductor, PVC.
- 4. Insulation type for bonding (grounding) conductor, CPE.
- 5. Insulation type for bonding (grounding) conductor, CR.
- 6. Optional shielding.
- 7. May be in coiled form.
- 8. In dark colours only.
- 9. Flame classification FT1.
- 10. Non-integral construction.
- 11. In all colours including clear and translucent (see report for compound designation).
- 12. Low temperature rating -40C

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